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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/657,519	09/08/2000	Marco Bottazzi	3572-21	1677

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EXAMINER	
SHAPIRO, JEFFERY A	

ART UNIT	PAPER NUMBER
3653	

DATE MAILED: 07/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/657,519	BOTTAZZI ET AL.	
	Examiner	Art Unit	
	Jeffrey A. Shapiro	3653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 August 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,2,4,5,7-19,21-37 and 39-50* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,2,4,5,7-19,21-37 and 39-50* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:.

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1, 2, 4, 5, 7-15, 17-19, 22, 23, 25, 31-33, 35-37, 39-43, 47, 49 and 50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oosterveen et al (US 5,468,942) in view of Kumagai et al (US 6,164,546). Oosterveen discloses the following.

As described in Claims 19, 25, 31, 35, 36 and 47;

a. portable terminals (see abstract, for example) with means for acquiring data relating to products to be purchased by customers in a shopping center (see col. 1, lines 18–26);

b. a plurality of cradles (2) for a corresponding plurality of portable terminals to be withdrawn and used by the customers of the shopping center for product data acquisition;

c. means for identifying each customer enabled to use the portable terminals (15) (see col. 2, lines 51-67 and col. 3, lines 1-7, 16-31 and 40-63);

d. means for communicating to each identified customer, a corresponding terminal to be withdrawn among said plurality of terminals for the product data acquisition (see col. 3, lines 22-26);

e. a data control and processing unit (see col. 3, lines 14-16 and 35-63) for example, which describes a computer which controls the system and can be construed to be a processing unit) connected to the identifying means (see the card and PIN code in col. 3, lines 10-14) and the communicating means (see col. 3, lines 22-31);

f. said control unit carrying out the identification of the customer by means of said identification means, associating the corresponding terminal to the identified customer and communicating to the identified customer the corresponding terminal to be withdrawn by means of said communicating means (see col. 3, lines 22-31);

g. said plurality of cradles, said identifying means, said communication means, and said control unit are housed in a single housing (note again, rack (2), as shown in figure 1);

h. and wherein said plurality of cradles are housed in a substantially flat portion of said housing, said substantially flat portion being provided in close proximity of the customer identifying means so as to allow access to said plurality of terminals;

(See figure 3 of Oosterveen, which shows a cross-sectional area of a scanner position on rack (2). Note that the flat upper and lower portions indicated by arrows, can be construed to form a substantially flat portion.)

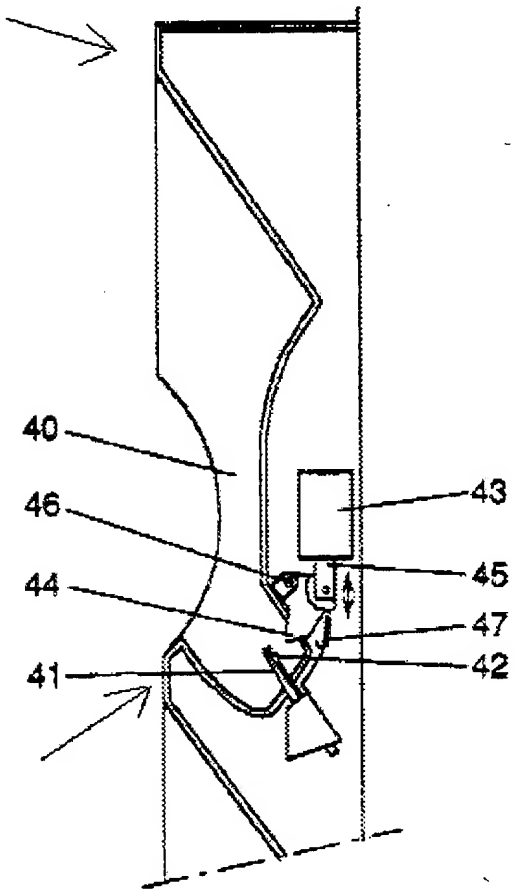

FIG. 3

i. said portion housing said terminals comprises a box-shaped body including a plurality of compartments constituting said plurality of terminal

cradles (note figures 1 and 3 which indicate several terminals and a box-shaped body);

As described in Claims 4 and 41;

j. each compartment of said plurality of compartments is adapted to house a terminal of said plurality of terminals and comprises locking/unlocking means (see elements 41-47 in figure 3) of the terminal housed therein (see also col. 4, lines 14-35);

As described in Claim 5;

k. said box-shaped body comprises first electrical connectors (42) adapted to cooperate with second electrical connectors (42') provided on the terminals (see col. 4, lines 15-25);

As described in Claim 36;

l. each compartment of said plurality of compartments comprises;

i. a first upper aperture for inserting the terminal, wherein a vertical axis and a terminal insertion axis inclined by a predetermined angle with respect to the vertical axis are defined;

ii. a second lower service aperture below the first aperture (again, note figure 3, which illustrates a smaller, sub aperture near element (41);

iii. means for guiding the terminal into the compartment (note that the sides of the apertures act to guide the terminal into the compartment);

(See figure 3, which illustrates cavity (40) with an axis of insertion which is at an angle with the horizontal axis—again, see discussion of Applicant's Claim 2, above, noting that regardless of whether or not the axis is vertical or horizontal, the system works the same as Applicant's system.)

As described in Claim 7;

m. said second aperture has a size larger than that of said first aperture (see figure 3 and previous discussion);

As described in Claim 8;

n. each said compartment of said plurality of compartments comprises a terminal support element arranged inside each compartment, substantially away from a projection of the first aperture along the vertical axis (see figure 1, which illustrates various support elements, such as (10));

As described in Claim 9;

o. said terminal support element comprises opposed guiding walls inclined at said predetermined angle with respect to said vertical axis (see previous discussion);

p. one of said walls comprises a support step for contacting a lower end of the terminal (see lower, second aperture, discussed above);

q. the support step being arranged outside the projection of the first aperture along the vertical axis (note that this is how the first and second aperture described above, are arranged);

As described in Claim 12;

r. the customer identifying means comprises at least any one of the following means;

magnetic card reader, smart card reader, bar code reader, optical receiver, radio or mobile phone receiver, a fingerprint reader, fingerprint or retina detector, a device for entering a numerical code, or a voice detector (see col. 2, lines 61-67 and col. 3, lines 1-7, reciting a card reader);

As described in Claims 13 and 42;

s. the means for communicating to identified customers the terminals to be withdrawn comprises at least any one of the following means;

visual communication means on a display or monitor (18), visual communication means (13 or 18') in the proximity of each cradle of said plurality of cradles, sound or voice communication means, terminal lifting means (41-47), terminal lifting means provided into each cradle of said plurality of cradles; (see elements (41-47 and figure 3.)

20a. each compartment has a terminal lifting mechanism for selectively lifting the terminal allocated to the entitled customer relative to the compartment (again, see figure 3 and elements (41-47);

As described in Claim 15;

The dispensing device according to Claim 1, further comprising one of the following:

t. data transmission *means to an optical type terminal;*

u. data transmission *means to a radio type terminal;*

v. data transmission *means from an optical type terminal;*

w. data transmission *means from a radio type terminal;*

(see col. 3, lines 10-63, noting that optical and radio type terminals are considered to be functional equivalents to each other);

As described in Claims 17 and 40;

x. said compartment comprises at least one sensor for indicating presence and/or correct arrangement of the terminal into the compartment (see figure 3, noting that if the contacts (42 and 42') are not correctly locked, then the system will recognize the connection as being broken or unbroken);

As described in Claims 22-23 or 32;

y. said connection network is a wireless local network;

z. said connection network is a geographic network;

(Note that these are functional equivalents of each other and that the scanners of Oosterveen work wirelessly.)

As described in Claim 37;

aa. a compartment further wall which is opposed to the compartment first wall (see figure 3 of Oosterveen);

As described in Claim 39;

ab. the support step has a first electrical connector thereon for mating with a second electrical connector on the terminal (see Oosterveen, figure 3, elements 41-47 and contacts (42 and 42'));

As described in Claim 49;

ac. said multifunctional customer interface comprises at least one of the following means: visual communicating means on a display or a monitor; visual communication means in proximity of each cradle of said plurality of cradles (13), sound or voice communication means, terminal lifting means provided in each cradle of said plurality of cradles;

Regarding Claims 1, 19, 35, 36 and 47, Oosterveen does not expressly disclose, but Kumagai discloses a lower discharge aperture in a scanner holder. See Kumagai, figures 6 and 13, element (2), which is shown as having a cut-out portion to accommodate a wire.

Both Oosterveen and Kumagai are considered to be analogous art as they both concern hand-held scanner storage.

Note that it would have been obvious to one of ordinary skill in the art to have removed a portion of material below Oosterveen's lower aperture or any other location.

From Kumagai's figures 6 and 13, one ordinarily skilled in the art would have found it logical and reasonable to remove material from the lower aperture so as to lower material costs by requiring less material for the final holder as well as to allow passage of unwanted items so as to keep the holders clean and to allow for accommodation of a wire, antenna or handle of one of Oosterveen's scanners.

Regarding Claim 2, Oosterveen can be construed to describe the following.

As described in Claim 2;

ae. said portion for housing said terminals is substantially horizontal;

Note that it would have been obvious to one of ordinary skill in the art to have located the rack (2) of Oosterveen either vertically or horizontally, and that the system of Oosterveen, even if it is vertical, would still function substantially the same as Applicant's system.

Regarding Claim 10, Oosterveen can be construed to describe the following.

As described in Claim 10;

af. said box-shaped body comprises a covering surface provided with a plurality of holes at said first terminal insertion apertures;

Note that it would have been obvious to place a tarp or cloth cover over the rack to prevent protect the scanners from dust, etc.

Regarding Claim 11, Oosterveen can be construed to describe the following.

As described in Claim 11;

ag. means for moving the housing;

Note that official notice is taken that it is well-known in the art to make a stationary item portable by placing wheels on such a structure.

Regarding Claims 14, 18, 33 or 50 Oosterveen can be construed to describe the following.

As described in Claims14, 18, 33 or 50;

ah. the communicating means provides one of marketing information, promotional information and a discount voucher;

See printer (19) which produces a receipt, which one ordinarily skilled in the art would recognize as being able to be used as a voucher for a discount. For example, note discount programs where after so many receipts are presented, a discount or prize is obtained. Note also that a receipt by itself can be used as a voucher to pick up merchandize, since it has the product identification listed on it.

Regarding Claim 43, Oosterveen can be construed to describe the following.

As described in Claim 43;

ai. wherein when contacting the support step, two thirds of a longest aspect of the terminal along the predetermined angle extends out of the compartment;

Note that it would be a matter of design choice as to how much of the terminal to be exposed outside the docking port, based upon the requirements of the particular portable terminal and docking port requirements.

Claims 16, 28 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oosterveen et al (US 5,468,942) in view of Kumagai et al (US 6,164,546), and further in view of Ziarno. Oosterveen discloses the system as described above. Oosterveen does not expressly disclose, but Ziarno discloses the following.

As described in Claim 16;

ai. said housing comprises a charge/discharge circuit for batteries of the terminals (7778);

As described in Claims 28 and 34;

aj. a means to charge an amount to be paid directly to a bank account of the customer (note debit card (150) in col. 17, lines 22-26);

ak. said means for charging the amount to be paid is controlled by the terminal (note that tallier routine (S480) is run by the processor of the system);

Both Oosterveen and Ziarno are considered to be analogous art as they concern portable user-based record bearing and data collection devices.

At the time of the invention it would have been obvious to have used a charge/discharge circuit, which charges the portable scanner terminal as it is docked in its rack location, in the system of Oosterveen.

It also would have been obvious to charge the total amount of items to a bank account through the scanner terminal.

The suggestion/motivation for including a charge/discharge circuit would have been to recharge the terminals.

The suggestion/motivation for charging the total amount of items to a particular bank account through the scanner terminal would have been because one ordinarily skilled in the art would recognize that such a capability would increase throughput of sales by making it easier for a customer to charge the items scanned by the scanner.

3. Claims 21, 24 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oosterveen et al (US 5,468,942) in view of Kumagai et al (US 6,164,546), and further in view of Van Solt (US 5,397,882). Oosterveen discloses the following.

As described in Claims 21 and 26;

al. said control station is in remote position with respect to said at least one terminal dispenser (see figures 1, which illustrates computer and control station (14-18);

As described in Claim 24;

am. means for downloading the product data acquired through the terminals (Oosterveen's computer);

Oosterveen does not expressly disclose, but Van solt discloses the following.

As described in Claims 21 and 26;

an. said means for downloading the product data is provided in remote position with respect to the terminal dispenser;

(Note that the product data is worked with and downloaded remotely by the scanner. See Van Solt, incorporated by reference in Oosterveen at col. 1, lines 14-17, at figure 2, which illustrates a scanner (10) with memory (16), which is described in col. 3, lines 1-25);

As described in Claim 24;

ao. means for computing, as a function of the acquired data, an amount to be paid (see Van Solt, col. 3, lines 1-25, which tallies a number of product prices of products chosen);

Both Oosterveen and Van Solt are considered to be analogous art because they both concern hand-held data acquisition devices.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to have download product data remotely with respect to the terminal dispenser and to compute an amount to be paid.

The suggestion/motivation would have been to allow customers to use the terminal to scan items throughout the store and to compute the final total of items the customer has bought.

4. Claims 29, 30, 44-46 and 48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oosterveen et al (US 5,468,942) in view of Kumagai et al (US 6,164,546), and further in view of Nambudiri et al (US 6,640,214 B1). Oosterveen discloses the system as described above. Oosterveen does not expressly disclose, but Nambudiri discloses the following.

As described in Claim 29;

ap. wherein at least a portion of the terminals used for acquiring the product data is dispensed to the customers for personal use (see Nambudiri, figure 10, which illustrates the PDA-type scanning apparatus which can be used for personal use such as reviewing personal schedules);

As described in Claims 30 and 44-46;

aq. wherein at least a portion of the terminals used for acquiring the product data is a code reading device provided with an interface for the connection with a personal terminal belonging to the customers (note that it would have been obvious to one ordinarily skilled in the art to have used

PDA accessories owned by the user to interface with the code reading device);

As described in Claim 48;

ar. said multifunctional customer interface is based on multimedia technology;

Both Oosterveen and Nambudiri are considered to be analogous art because they both concern hand-held data acquisition devices.

At the time of the invention, it would have been obvious to one of ordinary skill in the art to have used a PDA-based bar code reading device of Nambudiri in the system of Oosterveen.

The suggestion/motivation would have been to enable home data transfer and home as well as in-store shopping. See Nambudiri abstract and col. 2, lines 46-49

Response to Arguments

5. Applicant's arguments filed 5/13/05 have been fully considered but they are not persuasive. Applicant asserts that Oosterveen's lower aperture does not have a "lower discharge aperture" used to allow passage of small items and dust through the holding aperture. However, it would have been obvious for one ordinarily skilled in the art to have removed material from Oosterveen's holder aperture so as to lower material cost in making the product. Further, from observing Kumagai's holder (2) in figures 6 and 13, note that one ordinarily skilled in the art would have logically deduced that by

creating a lower hole or aperture open below the scanner, unwanted dirt, dust, etc., would fall through, therefore keeping the holder clean. Further, clearance for a holder's appendages such as an antennae or a wire would also require such an aperture to be made in the lower region of Oostervene's holder. Therefore, the rejection of the claims is maintained.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey A. Shapiro whose telephone number is

(571)272-6943. The examiner can normally be reached on Monday-Friday, 9:00 AM-5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Donald P. Walsh can be reached on (571)272-6944. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jeffrey A. Shapiro
Examiner
Art Unit 3653

July 18, 2005

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